Children

“In motor vehicle crashes are the leading cause of death for children ages 3 to 14.”

In 2004, there were nearly 61 million children age 14 and younger in the United States. This age group made up 21 percent of the total U.S. resident population in 2004.

Motor vehicle crashes are the leading cause of death for children of every age from 3 to 14 years old (based on 2002 figures, which are the latest mortality data currently available from the National Center for Health Statistics). In 2004, there were a total of 42,636 traffic fatalities in the United States. The 14 and under age group accounted for 5 percent (2,157) of those traffic fatalities. This age group accounted for 4 percent (1,638) of all vehicle occupant fatalities, 9 percent (246,000) of all the people injured in motor vehicle crashes, and 8 percent (214,000) of all the vehicle occupants injured in crashes.

Every day in the United States, an average of 6 children age 14 and younger were killed and 673 were injured in motor vehicle crashes during 2004.

In the 14 and under age group, males accounted for 56 percent of the fatalities and 47 percent of those injured in motor vehicle crashes during 2004.

Figure 1
Total Traffic Fatalities Among Children 14 and Younger by Age Group, 1994-2004
Alcohol-Related Crashes and Children

In 2004, a total of 442 (21\%) of the fatalities among children age 14 and younger occurred in crashes involving alcohol. Of those 442, approximately half (220) of those killed were passengers in vehicles with drivers who had been drinking, with blood alcohol concentration (BAC) levels of .01 gram per deciliter (g/dL) or higher. An additional 115 children were killed as passengers in vehicles with drivers who had not been drinking.

Another 64 children age 14 and younger who were killed in traffic crashes in 2004 were pedestrians or pedalcyclists who were struck by drinking drivers (BAC .01 g/dL or higher).

Pedestrians

There were 4,641 total pedestrian fatalities in 2004. The 14 and under age group accounted for 363 (8\%) of those fatalities. Almost one-fifth (17\%) of the traffic fatalities in the 14 and under age group were pedestrians.

In 1994, there were 761 pedestrian fatalities in the 14 and under age group. From 1994 to 2004, the number of pedestrian fatalities in this age group decreased by 52 percent, with the 4-7 age group showing the largest decrease (59\%).

Of the total 363 pedestrian fatalities among children age 14 and younger in 2004, 230 (63\%) of those killed were males.

In 2004, a total of 68,000 pedestrians were injured, 17,000 of those injured were age 14 and younger, and males accounted for 58 percent (10,000) of those 17,000 injured.

Figure 2
Total Pedestrian Fatalities Among Children 14 and Younger by Age Group, 1994-2004
During 2004, 43 percent of the young pedestrian fatalities occurred between the hours of 4 p.m. and 8 p.m., and 81 percent occurred at non-intersection locations.

**Pedalcyclists**

A total of 725 pedalcyclist were killed in motor vehicle crashes in 2004. The 14 and under age group accounted for 130 (18%) of those fatalities. Males age 14 and younger accounted for 75 percent (98) of the pedalcyclist fatalities.

The 130 pedalcyclist fatalities in 2004 for the 14 and under age group represent a decrease of 53 percent from the 276 killed in 1994.

In 2004, a total of 41,000 pedalcyclists were injured in motor vehicle traffic crashes. Twenty-nine percent (or an estimated 12,000) of the pedalcyclists who were injured were age 14 and younger.

Figure 3
**Total Pedalcyclist Fatalities Among Children 14 and Younger by Age Group, 1994-2004**

“In 2004, 29 percent of the pedalcyclists injured in motor vehicle crashes were 14 years old or younger.”
Restraint Use and Their Effectiveness

Research has shown that lap/shoulder safety belts, when used, reduce the risk of fatal injury to front seat occupants (age 5 and older) of passenger cars by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light truck occupants, safety belts reduce the risk of fatal injury by 60 percent and the risk of moderate-to-critical injury by 65 percent.

During 2004, 7,810 passenger vehicle occupants age 14 and younger were involved in fatal crashes. For those children where restraint use was known, 29 percent were unrestrained; among those who were fatally injured, 50 percent were unrestrained.

Table 1
Restraint Use by Passenger Vehicle Occupants Involved in Fatal Crashes by Age Group, 2004

<table>
<thead>
<tr>
<th>Percentage Unrestrained</th>
<th>Age Group (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;1</td>
</tr>
<tr>
<td>Unrestrained</td>
<td>16</td>
</tr>
</tbody>
</table>

Research on the effectiveness of child safety seats has found them to reduce fatal injury by 71 percent for infants (younger than 1 year old) and by 54 percent for toddlers (1-4 years old) in passenger cars. For infants and toddlers in light trucks, the corresponding reductions are 58 percent and 59 percent, respectively.

In 2004, there were 495 passenger vehicle occupant fatalities among children under 5 years of age. Of those 495 fatalities, an estimated 173 (35%) were totally unrestrained.

Table 2
Children Under 5 Years Old Fatally Injured in Passenger Vehicle Crashes by Age Group and Type of Restraint, 2004

<table>
<thead>
<tr>
<th>Type of Restraint</th>
<th>Infants (Under Age 1)</th>
<th>Toddlers (Age 1-4)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>None Used</td>
<td>36</td>
<td>142</td>
<td>178</td>
</tr>
<tr>
<td>Child Safety Seat</td>
<td>80</td>
<td>191</td>
<td>271</td>
</tr>
<tr>
<td>Adult Safety Belt</td>
<td>4</td>
<td>42</td>
<td>46</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>375</strong></td>
<td><strong>495</strong></td>
</tr>
</tbody>
</table>

Note: In this table, fatalities with unknown restraint use have been distributed proportionally across the known restraint use categories.

Among children under 5 years old, an estimated 451 lives were saved in 2004 by child restraint use. Of these 451 lives saved, 413 were associated with the use of child safety seats and 38 with the use of adult belts.

At 100 percent child safety seat use for children under 5, an estimated 566 lives (that is, an additional 114) could have been saved in 2004.
“Children in rear-facing child safety seats should not be placed in the front seat of vehicles with passenger air bags. The impact of a deploying air bag on a rear-facing child safety seat could injure the child.”

From 1975 through 2004, an estimated 7,472 lives were saved by child restraints (child safety seats or adult safety belts).

In February 2005, NHTSA conducted the National Occupant Protection Use Survey (NOPUS). One of the studies in the survey was the Controlled Intersection Study, which provided more detailed information about child restraint use.

Table 3
Restraint Use by Children Age 7 and Younger (from NOPUS)

<table>
<thead>
<tr>
<th>Grouping</th>
<th>Restraint Use (Percent)</th>
<th>Grouping</th>
<th>Restraint Use (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>82</td>
<td>Rush Hour</td>
<td>80</td>
</tr>
<tr>
<td>Infants (&lt;1 Year)</td>
<td>98</td>
<td>Non-Rush Hour</td>
<td>85</td>
</tr>
<tr>
<td>Toddlers (1 to 3 Years)</td>
<td>93</td>
<td>Weekday</td>
<td>83</td>
</tr>
<tr>
<td>Booster Age (4 to 7 Years)</td>
<td>73</td>
<td>Weekend</td>
<td>79</td>
</tr>
<tr>
<td>Passenger Cars</td>
<td>78</td>
<td>City</td>
<td>78</td>
</tr>
<tr>
<td>Vans and SUVs</td>
<td>88</td>
<td>Suburban</td>
<td>85</td>
</tr>
<tr>
<td>Pickups</td>
<td>71</td>
<td>Rural</td>
<td>80</td>
</tr>
<tr>
<td>Front Seat</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back Seat</td>
<td>83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Important Safety Reminders

Failure to read the child safety seat instructions, in addition to vehicle owner manual instructions regarding safety belts, could result in serious injury or death as a result of a failure of the child safety seat to be securely and/or properly restrained.

Children in rear-facing child seats should not be placed in the front seat of vehicles equipped with passenger-side air bags. The impact of a deploying air bag striking a rear-facing child seat could result in injury to the child. NHTSA also recommends that children age 12 and younger sit in the rear seat away from the force of a deploying air bag.

Children age 12 and younger are safest when properly buckled in the back seat of a motor vehicle.

Always read the child restraint manufacturer instructions and the vehicle owner manual instructions.
For more information:

Information on youth safety is available from the National Center for Statistics and Analysis, NPO-121, 400 Seventh Street, SW., Washington, DC 20590. NCSA information can also be obtained by telephone or by fax-on-demand at 800-934-8517. Fax messages should be sent to 202-366-7078. General information on highway traffic safety can be accessed by Internet users at www.nhtsa.dot.gov/people/ncsa. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.